

**HAWAII PUBLIC UTILITIES COMMISSION
INVESTIGATION OF THE ELECTRIC UTILITY INFRASTRUCTURE
OF THE STATE OF HAWAII**

**Status Report on Commission Docket No. 96-0493
Subsequent to the Adoption of
House Concurrent Resolution No. 22, H.D. 2
by the Twentieth Legislature**

House Concurrent Resolution No. 22, H.D. 2, adopted by the Legislature in 1999, requests the Public Utilities Commission to submit a status report on Docket No. 96-0493, Instituting a Proceeding on Electric Competition, Including an Investigation of the Electric Utility Infrastructure in the State.

I.

Background

In December 1996, by Order No. 15285 (Attachment), the Commission instituted a proceeding to examine the issues related to the introduction of competition in the electric power industry ("electric industry") and to support the transition to a competitive electric industry in Hawaii. In light of industry restructuring activities occurring on the mainland, proposals before the U.S. Congress to mandate retail competition on a nationwide basis, and competitive issues being raised by local electric industry stakeholders, the Commission believed a thorough examination of the issues would help to determine the appropriate extent to which competition should be encouraged for the overall benefit of all consumers in the State.

The Division of Consumer Advocacy, Department of Commerce and Consumer Affairs ("Consumer Advocate"), and all regulated electricity providers were made parties to the proceeding. The Commission also invited all interested persons to participate in the proceeding. Together, there were nineteen docket parties and participants (jointly referred to as the "parties") representing the interests of industry stakeholders:

- . State agencies included the Consumer Advocate and the Department of Business, Economic Development, and Tourism, Energy Division.
- . City government, consumer interest, and business entities included the Counties of Hawaii, Maui and Kauai; U.S. Department of Defense; Life of the Land; the Association for Competition in Electricity; GTE Hawaiian Telephone Company, Incorporated; the Hawaii Renewable Energy Alliance); and the International Brotherhood of Electrical Workers, Local 1260.

- . The regulated providers of electric energy services were Hawaiian Electric Company Inc. and its subsidiaries, Maui Electric Company Limited, and Hawaii Electric Light Company Inc. (jointly referred to as "HECO"); and Kauai Electric Division of Citizens Utilities Company ("Kauai Electric").
- . Authorized non-utility power producers included Enserch Development Corporation; Puna Geothermal Venture; AES-Barbers Point, Inc.; and Waimana Enterprises, Inc.

In March and April 1997, the parties filed initial submissions on the issues to be explored in the proceeding, based on twelve preliminary issues set forth in the attached Order No. 15285. In May 1997, the Commission held a three-day workshop with subject matter experts to discuss the issues related to electric industry competition. Following the workshop, the parties formed a collaborative group ("the Collaborative") to attempt to arrive at a consensus, i.e., unanimous agreement, on the issues.

The Collaborative held six discussion sessions facilitated by the State Judiciary Center for Alternate Dispute Resolution until it reached a procedural impasse in January 1998.¹ To complete a final report requested by the Commission, the collaborative parties exchanged preliminary statements of position on issues identified during collaborative discussions. The facilitators and parties reconvened in March 1998, to formulate a schedule for completion of the final report. In June 1998, the parties held a meeting for final presentations and discussions. In October 1998, the Commission received the Collaborative Report consisting of the parties' final position statements on identified issues.²

II.

Status

As reflected in the Collaborative Report, the diverse interests and views of the parties prevented them from reaching a consensus on the issues raised during the proceeding.³ This outcome is not surprising or uncommon in comparison with similar proceedings held in other states. The issues surrounding competition in the electric

¹Meetings were held on August 28th, September 30th, October 1st, October 23rd, November 13th, and December 9, 1997.

²Due to its extensive length the Collaborative Report is not attached. However, those wishing to obtain a copy may do so upon request.

³The following summary is based on the parties' comments in the Collaborative Report.

industry are complex, interrelated, and interdependent. Resolutions to certain issues are often contingent upon the resolution of other issues. Like each state, Hawaii must address competition in a manner that is consistent with its needs, resources, and economy.

Hawaii is unique because each island is served by a single utility, and the utility grids are relatively small and not interconnected. Unlike most states where grids are interconnected, there is no spot market for the purchase or sale of excess power on a short-term basis, and emergency back-up service and interchange services are not available to the utility. Hawaii's energy markets are characterized by a limited number of large customers and alternative suppliers on each island. These factors have contributed to the achievement of certain economies under the current industry structure and present numerous challenges for electric industry stakeholders seeking a more competitive electric industry in Hawaii.

In Hawaii, the incumbent electric utility serves as the primary provider of electricity generation, transmission, and distribution. In addition, the utility provides various customer services such as billing, metering, customer information, and energy efficiency and conservation services. Limited competition exists in generation, where independent power companies sell power and by-products such as steam to the utilities and on-site customers, and where self-generation options are available. Limited competition also exists in customer services, where energy efficiency and energy conservation services are already competitive.

A majority of the parties believe increased competition in generation via competitive bidding for new power supplies ("competitive bidding"), is feasible, appropriate, and a logical first step to encourage competition in the State's electric industry. The Commission agrees and plans to proceed with an examination of the feasibility of competitive bidding. Because competitive bidding is a well-established mechanism, the Commission believes Hawaii will have the added benefit of learning from the experiences of other states that have implemented the process.⁴

Under competitive bidding, each incumbent utility would be required to solicit new generation through an open bid process. In general, proponents believe the implementation of competitive bidding will advance competition and ultimately benefit all customers. As a major benefit, proponents believe that competitive bidding will help to level the playing field among potential suppliers by subjecting all bidders to the same requirements. According to HECO, with the advent of Public Utilities Regulatory

⁴HECO reports that twenty-eight states have required competitive bidding for new resources, and utilities in four other states have voluntarily implemented competitive bidding.

Policy Act of 1978 (PURPA)⁵, the utilities received many unsolicited proposals but did not have an appropriate way of choosing the best projects. By placing all bidders under the same rules, requirements, and bidding window, competitive bidding should allow the utility to identify and request proposals which best meet its requirements and ensure that the best projects are selected. Enserch Development Corporation and Puna Geothermal Venture concurred, stating that "competition in the development of new and replacement generating capacity" will ensure that suppliers will ultimately provide the best new generation capacity, within appropriate time frames, at the optimal price, and for the greatest benefit of the ratepayers and general public.

Proponents of renewables contend that renewables will be at a disadvantage in the competitive bidding process because they typically have higher installed costs than conventional resources. The Commission will review specific policies to encourage renewable energy resources in the power generation mix.

In addition to increasing competition among suppliers, competitive bidding is expected to increase the level of competition for power resources by encouraging the use of new technologies. According to Kauai Electric, new, advanced generation technologies are available, and utilities no longer are the sole practical source of large or medium-scale power production facilities. In addition, advances in other forms of generation, including renewables, have greatly broadened the array of sources of generation in smaller blocks, many of which would be technically feasible for use in Hawaii. Based on Kauai Electric's own experience in pioneering competitive bid solicitations for its next unit of generation,⁶ the company believes that, in some cases, independent power producers or others may be able to provide new wholesale generation via facilities that are cheaper, cleaner, more fuel efficient, and can be installed more quickly than the ones the utility itself had planned.⁷ In addition, by encouraging both short and long term contracts, HECO believes it will encourage bids from new suppliers, with the opportunity for new technologies from a variety of resource options.

The Consumer Advocate and several other parties concur that competitive bidding is feasible on the larger islands. On the smaller islands, however, the issue is whether or

⁵PURPA requires the utility to buy electric power from private "qualifying facilities" at a cost equal to what it would cost the utility to generate or purchase the power themselves.

⁶On June 29, 1998, the Commission approved Kauai Electric's contract to purchase 26.4 MW from Kauai Power Partners, LP (an independent power producer), commencing in or around 2002.

⁷Kauai Electric also contends that statutory changes to streamline current site permitting processes and level the playing between PURPA Qualifying Facilities ("QFs") and non-QFs are fundamental prerequisites to competitive bidding and increased competition in wholesale generation.

not the level of aggregate demand may be large enough to warrant competitive bidding for new power generation sources. Because of the rapid advances in technology, including micro turbines and other efficient, small-scale generation, Kauai Electric recommends that the Commission consider mandatory bidding for smaller increments of generation. Kauai Electric also points out that competitive bidding for smaller packages of generation is currently permissible, though not mandated, if the utility desires to undertake it.

III.

Next Steps

Further steps by the Commission will involve the development of specific policies to encourage wholesale competition and the continuing examination of other areas suitable for the development of competition. The final results will be determined by decision and order of the Commission.

Attachment - Order No. 15285

electrpt.
January 18, 2000

ATTACHMENT

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

----- In the Matter of -----)
)
PUBLIC UTILITIES COMMISSION) DOCKET NO. 96-0493
)
Instituting a Proceeding on)
Electric Competition, Including)
an Investigation of the)
Electric Utility Infrastructure)
in the State of Hawaii.)
_____)

ORDER NO. 15285

Filed December 30, 1996
At 4:25 o'clock P.M.

Bertha F. Kurosawa
Chief Clerk of the Commission

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

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ORDER

I.

A.

Sweeping and profound changes are underway in the electric power industry in the United States. New federal rules have opened wholesale power markets to competition.¹ Public utilities that own, control, or operate facilities used to transmit electric energy in interstate commerce are required to unbundle (or price separately) transmission and ancillary services,² and establish tariffs that offer others (e.g., independent power

¹The Federal Energy Regulatory Commission (FERC) issued the final rules in FERC Order No. 888, Promoting Wholesale Competition Through Nondiscriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities. See 18 C.F.R. Parts 35 and 385 (1996).

²Historically, monopoly public utilities provided generation, transmission, and distribution of electric energy for a single rate. With the new rules, rates for wholesale transmission services are being desegregated (or unbundled) and offered separately.

producers, marketers, utility affiliates, and other utilities) non-discriminatory transmission access to wholesale power sales.

The new federal rules are aimed at encouraging economic efficiency and lower electricity prices in wholesale power markets by opening the transmission grid to all willing buyers and sellers of wholesale electricity. Among other things, the rules will reshape the traditional, monopoly structure of the electric power industry in the United States by facilitating the development of competitive generation markets, independently operated transmission systems, and consumer-oriented energy service. To position themselves for competitive markets, utility companies are restructuring through mergers, acquisitions, and the functional or corporate unbundling of electric generation, transmission, and distribution services.

Concurrently, state regulators are examining and implementing various restructuring models to support competitive and noncompetitive services, including alternative ratemaking and pricing methods, and new rules and regulatory approaches to balance ratepayer, shareholder, and consumer interests.

The key issue confronting states is whether to permit retail competition, where the exclusive right of a utility to sell to retail customers in its service territory is either relaxed or rescinded, and customers have direct access to retail transmission service and the wholesale generation market. At last count, three states (California, Rhode Island and New Hampshire) have legislatively mandated retail competition in their states by 1998, and more than half the states have initiated proceedings to examine whether retail competition is inevitable or desirable. Although a

number of states are embracing retail competition for its potential benefits (e.g., lower electricity prices, enhanced economic development, and the provision of customer choice in service options), others have decided that the risks of retail competition (e.g., utility bypass, potential stranded costs,¹ and cost-shifting to captive customers) presently outweigh the benefits.

Rather than utilizing a state-by-state approach to industry restructuring, some industry stakeholders (especially competitive power suppliers) are advocating comprehensive federal action to create a national market for electricity. Already, in the United States Congress, there is pending legislation calling for open retail competition on a nationwide basis.

B.

In general, the electric utilities in Hawaii (as well as Alaska, and most parts of Texas) are not directly affected by the new federal rules promoting wholesale competition. Although Hawaii's stand-alone island energy systems are a contrast to the interconnected systems of the contiguous states, and the full effects of federal plans and proposals are uncertain, we also recognize the need to prepare for a competitive electric industry environment in the State of Hawaii.

In the transition to a competitive electric industry in Hawaii, competition and industry restructuring are expected to radically change the manner in which electricity services are

¹Stranded costs are those costs incurred by the utilities for utility investments that may be made unrecoverable by the transition from regulation to a competitive market.

planned, priced, and provided. Competitive issues are being raised by electric industry shareholders and by the State legislature. Furthermore, pending initiatives in the United States Congress to mandate retail competition could significantly impact the State's energy systems and entire energy community.

In light of all of the above, a proceeding is in order to examine the issues related to the introduction of competition in the electric industry in the State of Hawaii. A thorough examination of the issues will help the commission determine the potential impacts of competition, the feasibility of various options, and the appropriate extent to which competition should be encouraged for the overall benefit of all consumers. Our foremost concern is to ensure the long-term efficiency and reliability of the State's energy systems and the availability of safe, affordable, and equitable electricity services to Hawaii's citizens.

II.

Hawaii Revised Statutes (HRS) §§ 269-7 and 269-15 and Hawaii Administrative Rules § 6-61-71 authorize the commission to examine and institute proceedings on any matter relating to a utility's practices and services or otherwise affecting the relations and transactions between the utility and the public. Pursuant to these authorities, the commission will, on its own motion, institute a proceeding to identify and examine the issues surrounding electric competition and to determine the impact of competition on the electric utility infrastructure in Hawaii.

The Division of Consumer Advocacy, Department of Commerce and Consumer Affairs (Consumer Advocate) and all currently regulated electricity providers will be made parties to this proceeding. To ensure a comprehensive examination and the development of a meaningful electric infrastructure, the commission will invite all interested electric service providers, organizations, business groups, and community groups to participate in this docket as intervenors or participants. The parties shall use the collaborative process to compile the information, create a discussion forum, and narrow the issues on the complexities of restructuring the electric industry in response to emerging competition.

III.

A.

For our purposes in this docket, the term "infrastructure" is used in the broadest sense to reflect our concern with all facets of Hawaii's electric industry. Our investigation will encompass not only the physical/technological, legal (statutory and regulatory), financial, institutional, and societal structures and features of the State's electric industry, but all aspects and arrangements that affect the manner in which electricity services are planned, produced, acquired, transported, furnished, and sold in the State of Hawaii. We are interested in both the substance and the process of the various aspects or components of the infrastructure. The infrastructure will consider the roles and responsibilities of all players, including providers, consumers, regulators, and the society in general.

B.

The overall objective of this proceeding is to examine the issues related to the introduction of competition in the electric industry and to identify the infrastructure necessary to support the transition to a competitive electric industry marketplace in Hawaii. Initially, the focus will be on the identification of feasible forms of competition and the appropriate mechanisms to support their establishment.

We set forth below a preliminary enumeration of the issues. The enumeration suggests some components of the framework that we may ultimately derive to support the introduction of competition in the electric utility industry in Hawaii. The commission expects that the issues set forth below will be added to, revised, and refined as we proceed with this docket. The commission does not expect, and neither should any participant in this docket, that the infrastructure ultimately developed will answer all questions and provide a completely trouble-free path to the enjoyment of competition in the electric utility industry. The infrastructure will provide only a framework and be subject to changes as we gather experience in this field.

In recent commission proceedings, options such as competitive bidding and retail wheeling⁴ for renewable energy resources have been proposed to increase fuel diversity and facilitate consumer access to renewable energy. We reserved to this docket the resolution of those issues. Indeed, the

⁴The term "wheeling" is used to describe the situation when a utility transmits power for others and is neither the generator nor purchaser of that power.

feasibility of such options must be examined in view of all competitive opportunities in Hawaii's electric industry marketplace.

The commission also has pending before it a number of proceedings that will impact upon the work we do in this docket. For example, the commission is currently examining a number of integrated resource plans filed by the electric service providers, including the promotion, development, and use of renewable energy, and a standby service rider for Hawaiian Electric Company, Inc. (HECO). These proceedings and others that may be necessitated for various reasons will continue to be examined by the commission, concomitantly with this docket. At some point, however, we expect the work in these other dockets to converge with our efforts here.

C.

The preliminary issues and questions to be addressed in this proceeding are as follows:

1. Feasible forms of competition: wholesale versus retail. Given the unique characteristics of our island energy systems, to what extent are increased wholesale competition and/or retail competition in the electric industry feasible in Hawaii? Which utility functions and services are, or can be, competitive? How should transmission and distribution services be unbundled to promote retail competition?

2. The regulatory compact. What happens to an electric utility's obligation to serve in a competitive environment? How do we maintain safe, reliable energy in a competitive environment?

3. Identification of the State's needs, policies, and objectives that may be supported by competition in the electric utility industry. Energy development, economic efficiency, fuel-savings, lower electricity prices, and greater customer choice are some of the areas that may benefit from the introduction of competition in the electric utility industry. What are other areas, and what are the policies and objectives that are furthered by encouraging competition in the electric industry?

4. Public interest benefits. Electric service at affordable rates, low-income assistance, rural service, environmental protection, and research and development programs are among the public interest benefits that may be at risk if the electric utilities must compete with other electricity providers. What are the public interest benefits provided under the existing industry structure that must be assured in a more competitive environment? How should other public interest benefits be treated, i.e., who should be responsible for their provision, and how should they be paid for?

5. Long-term integrated resource planning. The commission's existing Framework for Integrated Resource Planning (IRP) requires each electric utility to consider externalities (environmental, cultural, and other societal concerns) in determining the appropriate mix of generation resources to meet future demand. What are the appropriate ways in which to enhance current IRP practices, including demand-side management programs, in a more competitive industry environment? Will IRP planning still be relevant in a fully competitive environment?

6. Renewable resources. Renewable resource procurement may also be at risk in a competitive marketplace. What are the appropriate means of assuring the future promotion, development and use of the State's renewable energy resources?

7. Delineation of the physical facilities needed to support competition. What are the physical facilities necessary to support competition in the electric industry, and to ensure the efficient operation of our energy systems and the provision of adequate and reliable electric service? What changes to existing energy systems may be required in a more competitive environment? What investments are required and how should the facilities be owned and controlled?

8. Structural changes needed to support competition.
(a) How should the functions of production, transmission, and distribution be structured to support competition? How should the transmission function be structured to ensure a reliable, secure, and nondiscriminatory transmission system? Should utilities be required to divest themselves of the production and distribution functions? If so, how should such separation be had? Should there be an independent system operator responsible for transmission? If so, should it be for profit or nonprofit and who should own it and how should it be governed? (b) How should the competitive retail market be structured? Is there a need for a power exchange? If so, how should it be organized; should it be mandatory or voluntary; and what should the ground rules be?

9. Appropriate treatment of potential stranded costs.
The potential for stranded costs if customers are allowed to purchase electricity from alternative providers could expose

remaining customers to cost-shifting and higher rates. What is the appropriate treatment of potential stranded costs in a competitive industry environment, i.e., how should stranded costs be defined, identified, verified, and recovered?

10. Meaningful customer choice. The real economic cost of delivering electric energy must be passed through to the consumers to ensure meaningful customer choice in electric service options. In this regard, what cross-subsidies and cost-shifting to captive customers must be avoided?

11. Identification of moral, cultural, and ethical values. Electric energy is basic to human survival. Thus, it must be provided at affordable rates. What moral, cultural, and ethical values need to be considered in the provision of affordable electric energy in a competitive environment?

12. Identification of the objectives and the establishment of a time frame for the introduction of competition in the electric utility industry. What are the objectives to be attained in, and the options or steps to be pursued for, the introduction of competition in the electric utility industry in Hawaii? In addition, what are the timeframes and timetable for the establishment of such competition?

D.

The commission realizes that there may be other issues that need to be addressed in the initial stages of this proceeding, and that still more issues will arise as competition unfolds in the State's electric industry marketplace. Changes in federal and state energy policy, system capabilities, energy services, and

consumer needs are also expected to influence the course of this proceeding.

Furthermore, the listing of the components is not meant to determine the order in which the issues should be considered in developing an infrastructure. The commission expects that discussions on the issues will be an iterative exercise--that is, issues already examined will be subject to further examination as other issues are considered. In addition, the above categorization of issues is not intended to infer that the issues are discrete or self-contained. There is much overlap in the enumeration.

IV.

THE COMMISSION ORDERS:

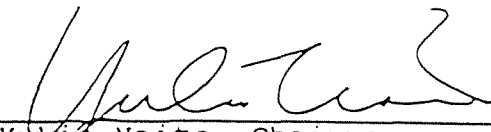
1. A proceeding is instituted to identify and examine the issues surrounding electric competition and to determine the impact of competition on the electric utility infrastructure in Hawaii.


2. The following shall be parties to this proceeding: the Consumer Advocate, HECO, Maui Electric Company, Limited, Hawaii Electric Light Company, Inc., and Kauai Electric Division of Citizens Utilities Company.

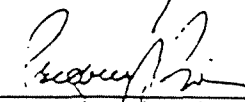
3. Any person desiring to intervene as a party or to participate in this proceeding shall file a motion for intervention or participation not later than 20 days from the filing of this order--that is, no later than January 21, 1997. Motions to intervene or participate shall comply with subchapter 4 of 6 Haw. Admin. Rules ch. 61, Rules of Practice and Procedure Before the Public Utilities Commission.

DONE at Honolulu, Hawaii this 30th day of December, 1996.

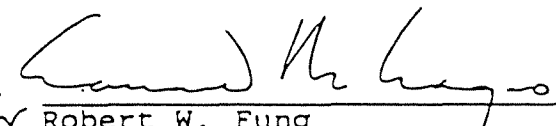
PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By 
Yukio Naito, Chairman

By 
Dennis R. Yamada, Commissioner

By 
Gregory G. V. Pai, Commissioner

APPROVED AS TO FORM:


Robert W. Fung
Commission Counsel

ELECTRIC.vrn

CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing Order No. 15285 upon the following parties, by causing a copy hereof to be mailed, postage prepaid, and properly addressed to each such party.

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Bertha F. Kurosawa
Bertha F. Kurosawa
Chief Clerk

DATED: December 30, 1996

